Feasibility of Computer-Assisted Tai Chi Education

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ABSTRACT

This study is an initial effort to examine the efficiency of a computer assisted Tai Chi educational model for learning the basics of Tai Chi, a Chinese exercise regime.

INTRODUCTION

Exercise intervention plays an important role in chronic disease management. However, traditional exercise training requires expensive equipment and large space. Tai Chi, an ancient Chinese exercise system, may be a perfect alternative. It integrates key components of modern exercise training and it does not require much space. Recent studies have demonstrated that Tai Chi is beneficial to physiological and psychosocial functions and has great potential to improve life quality for people with chronic conditions.[1 2] The goal of this study is to examine the efficiency of a computer assisted Tai Chi educational model learning the basics of Tai Chi.

METHODS

A web-based educational program driven by adult learning theories has been designed for this study.[3] A 15-item test was developed to examine an individual's knowledge about Tai Chi basics. An attitudinal questionnaire was also designed to access educational experience of a subject. At the beginning of the study, the subject was asked to complete a socio-demographic background form and the test (Pre-test). Each subject then spent up to 45 minutes to study Tai Chi basics using the educational program. After completion of an educational session, the subject was given the test again (Post-test) and the attitudinal questionnaire. Paired t test was performed to compare total scores for the pre- and post- test.

RESULTS

Fifteen consecutive students have been enrolled at the University of Maryland. The average age of the participants was 34±8.8 years old, 33% were males, 40% were Asian, and 60% were White. The average time they spent at school was 19±4.6 years. The mean of the pre-test score was 61±11.1 and the mean of the post-test was 79±2.6. There was significant improvement in knowledge about Tai Chi ($p < 0.0001$, pre/post difference = 18±2.5, 95% CI: 13.03 – 23.63) among participants.

CONCLUSIONS

Our web-based educational program was shown to be effective in facilitating individual's learning of Tai Chi basics. Our study demonstrated that computer-assisted education could facilitate Tai Chi learning. Development of more comprehensive computer-mediated instruction for Tai Chi is warranted.

REFERENCES

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